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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,138	11/03/2003	Boris E. Makutonin	J&C / 228A	3712

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EXAMINER

JEFFERY, JOHN A

ART UNIT PAPER NUMBER

3742

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/700,138

Applicant(s)

MAKUTONIN ET AL.

Examiner

John A. Jeffery

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4,7,13,19,22,23,47,57,61,63-92,102 and 104 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4,7,13,19,22,23,63-92 and 102 is/are allowed.
- 6) ☒ Claim(s) 47,57,61 and 104 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Terminal Disclaimer Approved***

The terminal disclaimer filed 8/26/04, disclaiming the terminal part of any patent granted on the instant application which would extend beyond the expiration date of U.S. Patent 6,657,165, has been approved and entered.

### ***Claim Objections***

Claim 104 is objected to because of the following informalities:

In line 9, "elements" must be changed to "element." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 47 and 104 are rejected under 35 USC 102(b) as being anticipated by Winstead (US 2,606,987). Winstead (US 2,606,987) in Fig. 5 discloses a thermal sealing element comprising support 10 on which a thick film heating element 4a is deposited. Porcelain enamel layer 3a insulates the electric heater from the support. See also col. 6, lines 13-43 and col. 4, lines 36-59.

Winstead (US 2,606,987) also discloses film layers 11 in Fig. 6. Furthermore, as best seen in Fig. 5, the pressure member 10 is hollow with a rectangular cross section. One of its surfaces 2a constitutes the working face that contacts the film to be sealed. Col. 6, lines 24-26. "Supplementary heat dissipation," such as a moving stream of water, is provided within the pressure member to maintain the pressure member cool. Col. 6, lines 17-23. Thus, in view of the supplementary heat dissipation material between the working face and other surfaces of the pressure member, the working face 2a and heater mounted thereon is thermally isolated from the other surfaces of the pressure member (i.e., "other components of the sealing element" as claimed) thus fully meeting this limitation.

***Joint Inventors -- Common Ownership Presumed***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligations under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

***Claim Rejections - 35 USC §§ 102 or 103***

Claims 57 and 61 are rejected under 35 U.S.C. 102(b) as being anticipated by Winstead (US 2,606,987) or, in the alternative, under 35 U.S.C. 103 as being obvious over Winstead (US 2,606,987) in view of EP546495. Winstead (US 2,606,987) in Fig. 5 discloses a thermal sealing element comprising a support 10 on which a thick film heating element 4a is deposited. See col. 6, lines 13-43. The heating element has enlarged portions 7a that inherently have a different overall resistance than smaller portions 4a. Because portions 4a are narrower than portions 7a, portions 4a produce higher heat due to the increased resistance.

If such inherency is disputed, then applicant is referred to EP546495 who demonstrates such a principle in Figs. 1A-10B. Note that the narrower portions of the electric heater film in EP546495 generate more heat than the outer portions. Such a technique enables the heater to apply more heat along its length at desired points by merely changing its geometry. Thus, more heat can be applied where it is needed depending on the application. In view of EP546495, it would have been obvious to one of ordinary skill in the art to vary the resistance along the length of the heater film of Winstead (US 2,606,987) to apply more heat along its length at desired points as needed by merely changing the heater's geometry.

***Allowable Subject Matter***

Claims 1, 4, 7, 13, 19, 22, 23, 63-92, and 102 are allowable over the art of record.

### ***Response to Arguments***

Applicant's arguments filed 8/26/04 have been considered but are not deemed to be persuasive. Applicant contends that claim 104 allegedly does not show isolating the heat from the heater by at least partially separating the heater from other components of the sealing elements by a space. Remarks, P. 30.

Winstead, however, fully meets the limitation. As noted in the rejections, Winstead in Fig. 5 discloses a hollow pressure member 10 with a rectangular cross section. One of its surfaces 2a constitutes the working face that contacts the film to be sealed. Col. 6, lines 24-26. "Supplementary heat dissipation," such as a moving stream of water, is provided within the pressure member to maintain the pressure member cool. Col. 6, lines 17-23.

The space within the hollow pressure member through which the cooling fluid flows fully reads on the "space" claimed in claim 104. In short, the working face 2a and heater mounted thereon is thermally isolated from the other surfaces of the pressure member (i.e., "other components of the sealing element" as claimed) by the intervening space provided by the hollow pressure member 10. The rejection is proper.

### ***Other Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant should (1) separately consider the art, and (2) consider

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the art together with the previously cited prior art for potential applicability under 35 U.S.C. §§ 102 or 103 when responding to this action. DE 840 and GB 844 disclose electric heaters with varying resistance along their lengths.

### ***Final Rejection***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

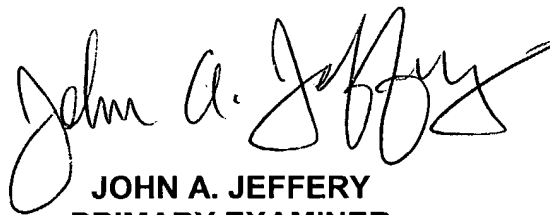
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Jeffery whose telephone number is (703) 306-4601. The examiner can normally be reached on Monday - Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans, can be reached on (703) 305-5766. All faxes should be sent to the centralized fax number at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

A handwritten signature in black ink, appearing to read "John A. Jeffery", with a stylized flourish at the end.

**JOHN A. JEFFERY  
PRIMARY EXAMINER**

**10/29/04**